

App. No. 10/501,865
Office Action Dated 3/15/2005

REMARKS

Favorable reconsideration of this application is requested in view of the above amendments and the following remarks. Claims 1, 7, 8, 11 and 14 are hereby amended. Claim 15 is new.

The amendment of claim 1, reciting "a third insulating layer formed between the third metal area and the substrate, the third insulating layer being in direct contact with the third metal area and the substrate", is supported by Figure 1 (element 6). Claims 7 and 14 are rewritten in independent form. The amendments of claim 8, reciting "the second metal area being coplanar with the first metal area" and "the fourth metal area being coplanar with the third metal area", are supported by Figure 9. The amendment of claim 11, reciting "a second metal area formed opposing the substrate, the second metal area being coplanar with the first metal area", is supported by Figure 12. New claim 15 is supported by subject matter of claim 2, Figures 1-3, page 9, lines 1-8, and page 7, lines 30-33.

Claims 7 and 14 were rejected as being indefinite. Claims 7 and 14 are amended to address the concerns of the Examiner. Favorable reconsideration of claims 7 and 14 is requested.

Claim 1 was rejected as being anticipated by Kato (JP2001060661). Applicants traverse this rejection. Kato does not suggest a MIM including a third insulating layer formed between the third metal area and the substrate, the third insulating layer being in direct contact with the third metal area and the substrate, as required by claim 1. Kato does not teach or suggest a layer provided between the third metal (20) and the substrate (10). See Figure 1.

Claims 8 and 9 were rejected as being anticipated by Bonhoure (US 6,111,742). Applicants traverse this rejection. Bonhoure does not suggest a MIM including a fourth metal area being coplanar with a third metal area, as required by claim 8. Rather, Bonhoure teaches a fourth metal layer (capacitor 23) connected vertically with respect to a third metal layer (capacitor 26). See Figure 3. Favorable reconsideration of claims 8 and 9 is requested.

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Claims 11 and 12 were rejected as being anticipated by Liu (US 6,198,153). Applicants traverse this rejection. Liu does not suggest a MIM including a second metal area formed opposing the substrate, the second metal area being coplanar with the first metal area, as required by claim 11. Rather, Liu teaches a second metal layer (32) connected vertically with respect to a first metal layer (28). See Figure 3. Favorable reconsideration of claims 11 and 12 is requested.

Claims 2-6 were rejected as being unpatentable over Kato in view of Roy (US 6,387,770). Applicants traverse this rejection. Roy does not remedy the deficiencies of Kato, as previously noted. Applicants are not conceding the correctness of the rejection as applied to the rejected claims.

Further, Roy does not suggest a MIM capacitor wherein the third metal area shields the second metal area from the substrate, as required by claim 15. Rather, the third metal area (lower electrode 204) taught by Roy forms a capacitor (along with upper electrode 202). Therefore, the third metal area taught by Roy is not provided for shielding the second metal area from the substrate.

Even further, Roy does not suggest a MIM capacitor wherein a surface area of a surface of the third metal area opposing the second metal area is smaller than a surface area of a surface of the second metal area, thereby providing means to adjust a Q value of a parasitic capacitor formed therebetween, as required by new claim 15. The difference in surface area between the lower and upper electrodes (204, 202) of Roy is not suitable for adjusting a Q value, but rather to avoid unwanted capacitor shorts (see column 10, lines 1-13).

Favorable reconsideration of claims 2-6 is requested.

Claim 7 was rejected as being unpatentable over Kato in view of Bonhoure. Applicants traverse this rejection. Claim 7 should be reconsidered allowable for at least the same reasons as claim 1, from which it depends. Applicants are not conceding the correctness of the rejection as applied to the rejected claim. Favorable reconsideration of claim 7 is requested.

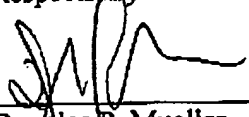
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Claims 8, 10, and 14 were rejected as being unpatentable over Bonhoure in view of Mercier (US 4,323,948). Applicants traverse this rejection. Mercier does not remedy the deficiencies of Bonhoure, as previously noted. Applicants are not conceding the correctness of the rejection as applied to the rejected claims. Favorable reconsideration of claims 8, 10, and 14 is requested.

Claim 13 was rejected as being unpatentable over Liu. Applicants traverse this rejection. Claim 13 should be reconsidered allowable for at least the same reasons as claim 11, from which it depends. Applicants are not conceding the correctness of the rejection as applied to the rejected claim. Favorable reconsideration of claim 13 is requested.

In view of the above, favorable reconsideration in the form of a notice of allowance is requested. Any questions regarding this communication can be directed to the undersigned attorney, Douglas P. Mueller, Reg. No. 30,300, at (612)455-3804.

Respectfully Submitted,



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